

## Virginia Division of Consolidated Laboratory Services

**PHOSPHORUS (COLORIMETRIC, ASCORBIC ACID, TWO REAGENT) by EPA 365.3**

Facility Name: \_\_\_\_\_ VELAP ID \_\_\_\_\_

Assessor Name: \_\_\_\_\_ Analyst Name: \_\_\_\_\_ Inspection Date \_\_\_\_\_

Relevant Aspect of Standards	Method Reference	Y	N	N/A	Comments
<i>Records Examined:</i> SOP Number/ Revision/ Date _____ Analyst: _____ Sample ID: _____ Date of Sample Preparation: _____ Date of Analysis: _____					
If the analysis was not performed on the day of collection, were samples preserved with 2 mL of H <sub>2</sub> SO <sub>4</sub> /Liter and stored at 4°C?	3.3				
Did the spectrophotometer or filter photometer a light path of 1 cm or longer?	6.1				
<b>Total Phosphorus Digestion</b>					
After the additions of 11 N sulfuric acid and ammonium persulfate, were sample aliquots either boiled for 30-40 minutes or heated in an autoclave at 121°C/15-20 psi for 30 minutes?	8.1.1 8.1.2				
Was bisulfite added to sample aliquots containing arsenic or high levels of iron and those samples heated for 30 minutes at 95°C?	8.1.3				
<b>Hydrolyzable Phosphorus Prep</b>					
Was sulfuric acid added to sample aliquots followed by boiling for either 30-40 or a final volume of about 10 mL was reached?	8.2.1 8.2.2				
After cooling, were samples filtered?	8.2.2				
Was bisulfite added to sample aliquots containing arsenic or high levels of iron and those samples heated for 30 minutes at 95°C?	8.2.3				
<b>Determinative Orthophosphorus Analysis</b>					
(Done as Analytical determination after the above preparations <b>or</b> on its own if orthophosphorus is the only target analyte.)	2.2				
Was 11 N sulfuric acid followed by ammonium molybdate-antimony potassium tartrate added to sample aliquots? (Do not add sulfuric acid at this point if it was added for total phos or hydrolysable prep.)	9.3.1				
Was ascorbic acid added to sample aliquots next followed by mixing?	8.3.2				
Were standards and samples allowed to stand for at least 5 minutes prior to analysis after addition of ascorbic acid?	8.3.3				
Were absorbances measured at 650 nm?	8.3.3				
Were sample concentrations determined from a standard curve?	8.3.3				
Notes/Comments:					